

REMARKS

Two independent claims are pending, claims 1 and 68.

Claim 1 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Wong (US 6557102). Claim 1 has been amended to include features from dependent claim 61. With the amendments, the examiner is urged to reconsider and withdraw the rejection.

Amended claim 1 now requires the combination of data coalescence ("more than one client program connected to a network stores the same data item at the same location or locations in a data repository") and pseudorandom distribution of physical storage locations ("the pseudorandom distribution of the digital fingerprints introduces pseudorandomness into the physical location"). Neither of the examiner's references, nor any other prior art of which applicant is aware, taught this combination.

The examiner rejected claim 61, which addressed similar subject matter, as unpatentable over Wong, but there is absolutely no suggestion in Wong of using fingerprints to introduce pseudorandomness into physical storage locations. The examiner points to three locations (5:29-59; 1:62-2:8, 6:10-65) in Wong as teaching this feature, but none even hints at the feature. The three sections, and the remainder of Wong, have to do with Wong's use of hash operations to authenticate digital medical images (a change in a medical image can be detected by comparing a hash of the current image to a hash of the original image). Wong makes no suggestion of using a hash (or fingerprint) in connection with storing a data item, let alone of using the pseudorandomness of a hash to achieve pseudorandomness in the physical storage location of a data item.

Whiting (US 5778395) also fails to teach this feature of claim 1. Whiting does teach using fingerprints in connection with storing data items in a data repository, but is silent as to the physical locations at which the data items are stored. One can only conclude that the physical locations would be determined in a conventional manner, rather than as called for in claim 1.

Thus, neither Wong nor Whiting teach the requirement in claim 1 that "the pseudorandom distribution of the digital fingerprints introduces pseudorandomness into the physical location."

Accordingly, claim 1 is in condition for allowance.

Independent claim 68 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Whiting. The examiner is urged to reconsider and withdraw the rejection, as there is nothing in Whiting that suggests the innovative feature of claim 68 of "challenging a client that is attempting to deposit a data item already stored in the repository, to ascertain that the client has the full data item."

As explained in the application (paragraph 0066 of the published application), such a challenge is useful, for example, in preventing access by a party that only has possession of the fingerprint (dataname). Without the challenge procedure, it would be possible for a fingerprint to be broadcast anonymously, in an effort to allow recipients to download the associated data item from a data repository. But by following the challenge step of claim 68, the data repository is able to defeat such an effort, as merely having possession of the fingerprint is not sufficient to obtain access to the data item. A client must successfully pass a challenge designed to establish that the client has the full data item.

The examiner concedes "Whiting does not explicitly teach the step of challenging a client that is attempting to deposit a data item already stored in the repository to ascertain that the client has the full data item" (Office Action, p. 27), but finds the challenge procedure to be inherent in Whiting's use of a password in combination with the fingerprints. The examiner points to several locations in Whiting (26:66-26:6, 28:35-65, 7:8-58) to support this conclusion.

In fact, neither the password referred to by the examiner, nor anything else taught in Whiting, teaches or suggests the challenge procedure required by claim 68.

Whiting does not appear to even recognize the problem solved by the challenge procedure, let alone teach or suggest the procedure. Whiting includes the following sentence at 28, lines 51-54:

Thus, users can only successfully decrypt a file's data if they have the correct encryption fingerprint, presumably obtained by computing the fingerprint over their own copy of the file.

By presuming that a user has obtained the correct encryption fingerprint by computing it from its own copy of the file, Whiting demonstrates a failure to appreciate that a user could have obtained such a fingerprint by illegal or fraudulent means, and not actually have ever had a full copy of the file.

As the examiner points out (Office Action, p. 28), Whiting does require that a user supply a password to access the data repository, but this does not amount to claim 68's requirement that there be a challenge to ascertain that the user has the full data item. A user might well have a password but still attempt to access a data item without first having a complete copy.

Accordingly, claim 68 is in condition for allowance.

The remaining claims are all properly dependent on one or more of the independent claims, and thus allowable therewith. Each of the dependent claims adds one or more further limitations that enhance patentability, but those limitations are not presently relied upon. For that reason, and not because applicants agree with the examiner, no rebuttal is offered to the examiner's reasons for rejecting the dependent claims.

Additional claims dependent on one of claims 1 or 68 have been added. Claims 154-155 add the feature of encrypting the data item using a key derived from the content of the data item. Claims 156-174 were originally in the application as claims 114, 125-127, 133-134, 141-153, but were cancelled in response to the examiner's restriction requirement. On further review, it was appreciated that these claims, as they are dependent on claims 1 or 68, and not on the withdrawn independent claims, should properly have been included with the elected group of claims (i.e., with claims 1-97). Therefore, the examiner is urged to allow these additional dependent claims along with the other dependent claims.

Allowance of the application is requested.

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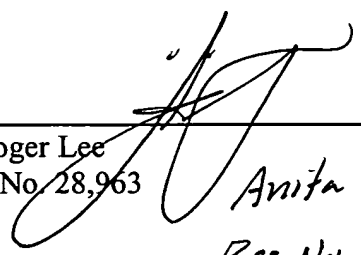
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Respectfully submitted,

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